

**DEPARTMENT OF TRANSPORTATION****DIVISION OF ENGINEERING SERVICES**

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-023986**Date Inspected:** 07-May-2011**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** An Qing Xiang**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG Components**Summary of Items Observed:**

On this day CALTRANS OSM Quality Assurance (QA) Inspector, Anand Upadhye was present during the times noted above for observations relative to the work being performed.

**WELDING**

This QA Inspector observed the following work in progress:

**Outside Yard – OBG Trial Assembly**

This QA Inspector observed ZPMC qualified welding personnel identified as 067949 perform welding by Flux Cored Arc Welding (FCAW), on Edge plate to Side plate weld of OBG Segment 14W. Weld joint is identified as SEG3020AH-002. ZPMC Quality Control (QC) Inspector identified as An Qing Xiang was present to monitor the welding process. The welding variables recorded by ZPMC QC appeared to be in general compliance with WPS-B-T-2232-ESAB. See attached picture.

This QA Inspector observed ZPMC qualified welding personnel identified as 045246 perform repair welding by Shielded Metal Arc Welding (SMAW), on longitudinal diaphragm to Anchor plate weld of OBG Segment 14W. Weld joint is identified as SEG3020X-004. ZPMC Quality Control (QC) Inspector identified as An Qing Xiang was present to monitor the welding process. The welding variables recorded by ZPMC QC appeared to be in general compliance with WPS-345-SMAW-4G (4F)-FCM-Repair-1, which is used as per welding repair report B-WR20845.

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This QA Inspector observed ZPMC qualified welding personnel identified as 067611 perform welding by Shielded Metal Arc Welding (SMAW), on Anchor plate I Rib to Floor beam weld at panel point PP125.5 of OBG Segment 14W. Weld joint is identified as SEG3020T-117. ZPMC Quality Control (QC) Inspector identified as An Qing Xiang was present to monitor the welding process. The welding variables recorded by ZPMC QC appeared to be in general compliance with WPS-B-P-2213-Tc-U4b-FCM-1.

This QA Inspector observed ABF qualified NDT personnel perform Ultrasonic Testing on Deck plate to Deck plate welds of OBG Segment 14E. Weld joints are identified as SEG3019-004 and SEG3019-001. A total of 9 Class A indications and 5 Class A indications were observed on weld joints SEG3019-004 and SEG3019-001 respectively. See attached picture.

This QA Inspector observed ZPMC qualified welding personnel identified as 045143 perform welding by Flux Cored Arc Welding (FCAW), on Vertical plate Rib stiffener weld at panel point PP122 of OBG Segment 13BW. Weld joint is identified as SEG3014S-002, 005. ZPMC Quality Control (QC) Inspector identified as Sun Tian Liang was present to monitor the welding process. The welding variables recorded by ZPMC QC appeared to be in general compliance with WPS-B-T-2231-ESAB.

This QA Inspector observed ZPMC qualified welding personnel identified as 045143 perform repair welding by Flux Cored Arc Welding (FCAW), on Vertical plate to Floor beam weld of OBG Segment 13BW. Weld joint is identified as SEG3014B-145. ZPMC Quality Control (QC) Inspector identified as Sun Tian Liang was present to monitor the welding process. The welding variables recorded by ZPMC QC appeared to be in general compliance with WPS-345-FCAW-3G (3F)-ESAB-Repair, which is used as per welding repair report B-WR20902.

This QA Inspector observed ZPMC qualified welding personnel identified as 066179 perform welding by Shielded Metal Arc Welding (SMAW), on Corner Assembly Edge plate Rib Stiffener weld between panel points PP121 and PP121.5 of OBG Segment 13BW. Weld joint is identified as CA3015A-009, 013. ZPMC Quality Control (QC) Inspector identified as Sun Tian Liang was present to monitor the welding process. The welding variables recorded by ZPMC QC appeared to be in general compliance with WPS-B-P-2114-FCM-1.

This QA Inspector observed ZPMC qualified welding personnel identified as 045240 perform welding by Flux Cored Arc Welding (FCAW), on Corner Assembly Edge plate Rib Stiffener weld between panel points PP123 and PP123.5 of OBG Segment 13CW. Weld joint is identified as CA3016A-117, 121. ZPMC Quality Control (QC) Inspector identified as Sun Tian Liang was present to monitor the welding process. The welding variables recorded by ZPMC QC appeared to be in general compliance with WPS-B-T-2132-ESAB.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

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## Summary of Conversations:

No significant conversations were reported on this date.

## Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang, phone: 15000422372 , who represents the Office of Structural Materials for your project.

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**Inspected By:** Upadhye, Anand

Quality Assurance Inspector

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**Reviewed By:** Clifford, William

QA Reviewer